REMARKS

This Amendment responds to the Office Action dated July 20, 2004 in which the Examiner objected to claims 6 and 10, rejected claims 1, 2, 6, 7, 10 and 12-14 under 35 U.S.C. §102(a), rejected claim 1 under 35 U.S.C. §103 and objected to claims 3-5, 8, 9 and 11 as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

As indicated above, claims 6 and 10 have been amended in order to correct minor informalities. Additionally, claims 1, 6 and 10 have been amended for stylistic reasons. The amendments are unrelated to a statutory requirement for patentability and do not narrow the literal scope of the claims.

As indicated above, minor typographical errors in the specification have been corrected. Applicants respectfully request the Examiner approves the corrections.

Attached to this Amendment are annotated sheets to correct minor informalities in the drawings. Applicants respectfully request the Examiner approves the annotated sheets. Replacement sheets will be provided when the drawing corrections are approved by the Examiner.

Claims 1, 2, 6, 7, 10 and 12-14 were rejected under 35 U.S.C. §102(a) as being anticipated by *Rumiko* (Japanese Reference 10-023060).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §102(a). The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

Rumiko appears to disclose allowing the system to conduct restoration processing in a short time on the occurrence of a fault in a router, in the case that a

plurality of LANs are interconnected via routers and a WAN. To allow the system to conduct restoration processing in a short time on the occurrence of a fault in a router, in the case that a plurality of LANs are interconnected via routers and a WAN. A routing table 15 stores dial numbers of master routers and backup routers connecting to each LAN being a communication opposite party of a LAN 5 and priority of each LAN network, the master routers and the backup routers (the master routers have higher priority than other routers, when the master routers are normal). In the case of sending a packet to a terminal equipment connecting to a LAN, a routing section 14 refers to the routing table 15 to send a packet any router having a higher priority among the master routers and the backup routers connecting to the LAN. A priority revision section 19 sets lower priority to a master router than that of backup routers, when the fault takes place in the master routers. (Abstract) [0016] Two or more terminal units 8-1 - 8-N are connected to LAN5. The master router 1 and the backup router 2 are connected to the circuit from which WAN6 differs while connecting with LAN5. Moreover, two or more terminal units 9-1 - 9-M are connected to LAN7. The master router 3 and the backup router 4 are connected to the circuit from which WAN6 differs while connecting with LAN7. [0017] The master router is equipped with the LAN side transceiver section 12, the WAN side transceiver section 13, the routing section 14, routing table 15, the external I/O processing section 16, the fault information table 17, the failure judging section 18, the priority modification section 19, and the notice section 20 of a failure. [0022] The routing section 14 has the function to perform routing processing based on the contents of routing table 15, when a packet is passed from the LAN side transceiver section 12. [0023] According to the directions of a manager inputted from I/O device

10, initial information is written in routing table 15, or the external I/O processing section 16 has the function which outputs the information stored in routing table 15 and the fault information table 17 to I/O device 10. [0024] The failure judging section 18 monitors the failure generating display 17-1 continuously, when it is judged that the contents of the failure generating display 17-1 are turned "on", asks for the master router which the failure generated based on the newest fault information stored in the fault information section 17-2, and has the function to pass the network address of LAN where it is connected further to the priority modification section 19. [0025] The priority modification section 19 has the function to change into lowest "F" the priority of the master router corresponding to the above LAN stored in routing table 15 from "1" based on the network address of LAN passed from the failure judging section 18. [highest] [0026] When it detects that the failure generated the notice section 20 of a failure in the master router 1, It asks for the number to be dialed of a master router and a backup router which should transmit the packet for the notice of failure generating with reference to routing table 15. When it detects that the failure generated the packet for the notice of a failure which added the number to be dialed in the function outputted to WAN6, and the master router 1, after starting the backup router 2, it has the function to stop actuation of the master router 1. [0027] The master router 3 has the same configuration as the master router 1. Moreover, although it has the configuration as the master router 1 also with the almost same backup routers 2 and 4, the notice section 20 of a failure is not formed in the backup routers 2 and 4, but the external I/O processing section 21 in the backup router 2 has further the function which copies the contents of routing table 15 other than the function with which the external I/O processing

section 16 in the master router is equipped to routing table 22 at the time of starting in them. In addition, the backup router 2, the external I/O processing section 21 in four, and each part other than routing table 22 are omitting illustration. [0044] Next, actuation when a failure occurs in the master router 1 is explained. [0045] When it detects that the failure generated the notice section 20 of a failure in the master router 1 in the master router 1, it is shown in the flow chart of drawing 9 -- as -- first -- routing table 15 -- each-- the priority of the numbers to be dialed of the master router stored in every field #1, #2, and -- to the field and a backup router acquires the number to be dialed of the higher one (S51). Then, the acquired packet for the notice of failure generating which added the number to be dialed for every number to be dialed is created, and each created packet is outputted to WAN6 through the WAN side transceiver section 13 (S52). [0046] Subsequently, the notice section 20 of a failure outputs an error message to I/O device 10 while starting the backup router 2 which is the master router 1 and a pair (S53), and it stops the master router 1 further (S54). [0047] If the external I/O processing section 21 in the backup router 2 is started, it will copy the contents of the routing table 15 in the master router 1 to the routing table 22 in the backup router 2. It enables this to succeed immediately the processing which the master router 1 was performing with the backup router 2.

Thus, *Rumiko* merely discloses a backup router 2 which has a I/O processing section 21 which copies the contents of a routing table 15 from a master router 1 to a routing table 22 when a failure in the master router 1 is detected. Nothing in *Rumiko* shows, teaches or suggests transferring route switching information from a route generating router as claimed in claim 1. In other words, even assuming *arguendo* that the backup router 2 is analogous to a route generating router as claimed in claim

1 and even assuming *arguendo* that the master router 1 in *Rumiko* is analogous to the route propagating router as claimed in claim 1, applicants respectfully submit that nothing in *Rumiko* shows, teaches or suggests transferring route switching information from the backup router (i.e. router generating router) as claimed in claim 1. Rather, *Rumiko* merely discloses copying the contents of the routing table 15 from the master router 1 to the backup router 2. In other words, *Rumiko* merely discloses transferring route information in a routing table but not the route switching information claimed in claim 1. Thus, nothing in *Rumiko* shows, teaches or suggests a route propagating router executing route propagation to a sender router based on a) routing information in a routing table and b) route switching information transferred from a route generating router as claimed in claim 1.

Similarly, since *Rumiko* merely discloses copying the contents of a routing table from a master router to a backup router, nothing in *Rumiko* shows, teaches or suggests a) transferring route valid/invalid situation and b) relaying information in compliance with the transferred route valid/invalid situation as claimed in claim 6. Rather, even assuming *arguendo* that the I/O device in *Rumiko* is analogous to the controlling means of claim 6 and the master router of *Rumiko* is analogous to a logical network connecting router in claim 6, nothing in *Rumiko* shows, teaches or suggests transferring valid/invalid information from the I/O device to the master router, nor is there any description of relaying information based upon the transferred valid/invalid information. Thus, nothing in *Rumiko* shows, teaches or suggests the features as claimed in claim 6.

As pointed out above, *Rumiko* merely discloses copying the contents of a routing table 15 from a master router to the routing table 22 of the backup router 2.

Nothing in *Rumiko* shows, teaches or suggests transferring control information from a control information converting router or executing route propagation to a sender router based on a) the transferred control information and b) routing information in a routing table as claimed in claim 10. The Examiner pointed out that the control information converting router of claim 10 reads on the backup router 2 of *Rumiko* while the route propagating router of claim 10 reads on the master router 1 in *Rumiko*. However, as pointed out above, applicants respectfully submit that there is no description in *Rumiko* that control information is transferred from the backup router to the master router or that route propagation is conducted based upon the transferred control information. Therefore, nothing in *Rumiko* shows, teaches or suggests the features as claimed in claim 10.

Finally, *Rumiko* merely discloses a backup router acquires a number to be dialed and that the acquired packet for the notice of failure generated is output to a WAN6 through a WAN side receiver section 13 [0045]. Thus, nothing in *Rumiko* shows, teaches or suggests a) replacing a route valid/invalid situation transferred based on a network management protocol with route switching information based on routing protocol as claimed in claim 12, b) outputting a route valid/invalid situation of a judged route to a logical network connecting router based on a network management protocol as claimed in claim 13 or c) outputting a route valid/invalid situation of a judged route to a route propagating router based on a routing protocol as claimed in claim 14. Rather, *Rumiko* merely discloses that the acquired packet is output to WAN6 through a WAN side receiver section. Nothing in *Rumiko* shows, teaches or suggests valid/invalid situation as claimed in claims 12-14.

Since nothing in *Rumiko* shows, teaches or suggests the features as discussed above with regard to claims 1, 6, 10 and 12-14, applicants respectfully request the Examiner withdraws the rejection to claims 1, 6, 10 and 12-14 under 35 U.S.C. §102(a).

Claims 2 and 7 depend from claims 1 and 6 and recite additional features. Applicants respectfully submit that claims 2 and 7 would not have been anticipated by *Rumiko* within the meaning of 35 U.S.C. §102(a) at least for the reasons as set forth above. Therefore, applicants respectfully request the Examiner withdraws the rejection to claims 2 and 7 under 35 U.S.C. §102(a).

Claim 1 was rejected under 35 U.S.C. §103 as being unpatentable over *Bondi* (U.S. Patent No. 5,710,885).

Applicants respectfully traverse the Examiner's rejection of the claim under 35 U.S.C. §103. The claim has been reviewed in light of the Office Action, and for reasons which will be set forth below, applicants respectfully request the Examiner withdraws the rejection to the claim and allows the claim to issue.

Bondi appears to disclose a network management station which reduces the elapsed time in which a network's topology is discovered and updated. (col. 1, lines 9-11) Through the discovery process, the network manager ascertains its internet protocol (IP) address, the range of IP addresses for the subnet components (i.e., the subnet mask), a routing table for a default router and address resolution protocol (ARP) cache tables from known and previously unknown nodes with SNMP agents. To ascertain the existence of network nodes, the discovery process performs configuration polls of known nodes and retrieves the ARP cache tables from the known nodes, and the routing tables. The network manager then verifies the

existence of those nodes listed in these tables that it has not previously recorded in its database. (col. 2, lines 7-18) FIG. 7 is a flow diagram of the operation of the network management station during discovery and status verification. Initially, in discovery the network management station receives ARP caches and router tables from various nodes on the network via a configuration poll. The ARP caches and routing tables provide the network management station with, for example, the IP address of nodes along the network. The information obtained from the ARP cache and the routing tables is then stored in an IP topology database. As noted, the determination to manage the node is made by the network management station or network management personnel. (col. 7, lines 24-34)

Thus, *Bondi* merely discloses a network management station which sends polling messages to a plurality of nodes and determines if the nodes are available (i.e. a node monitoring method). Nothing in *Bondi* shows, teaches or suggests 1) a route generating router replacing control information with route switching information to output the route switching information and 2) a route propagating router having a routing table and executing route propagation to a sender based on a) routing information in the routing table and b) route switching information transferred from the route generating router as claimed in claim 1. Rather, *Bondi* merely discloses a node monitoring method.

Since nothing in *Bondi* shows, teaches or suggests the invention as claimed in claim 1, applicants respectfully request the Examiner withdraws the rejection to claim 1 under 35 U.S.C. §103.

Since objected to claims 3-5, 8, 9 and 11 depend from allowable claims, applicants respectfully request the Examiner withdraws the objection thereto.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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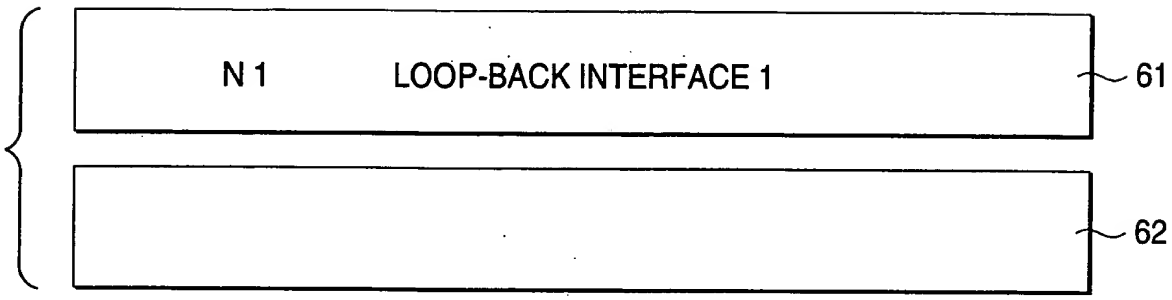
(a)

FIG. 4 (d)



(b)

FIG. 4 (e)

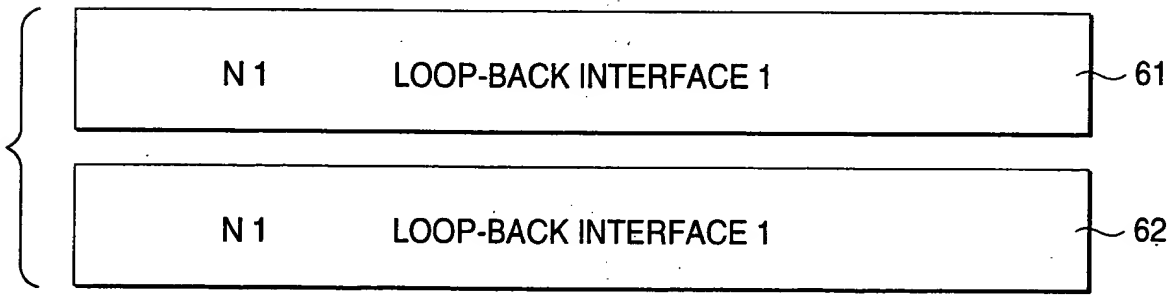


FIG. 12 Prior Art